DGT System

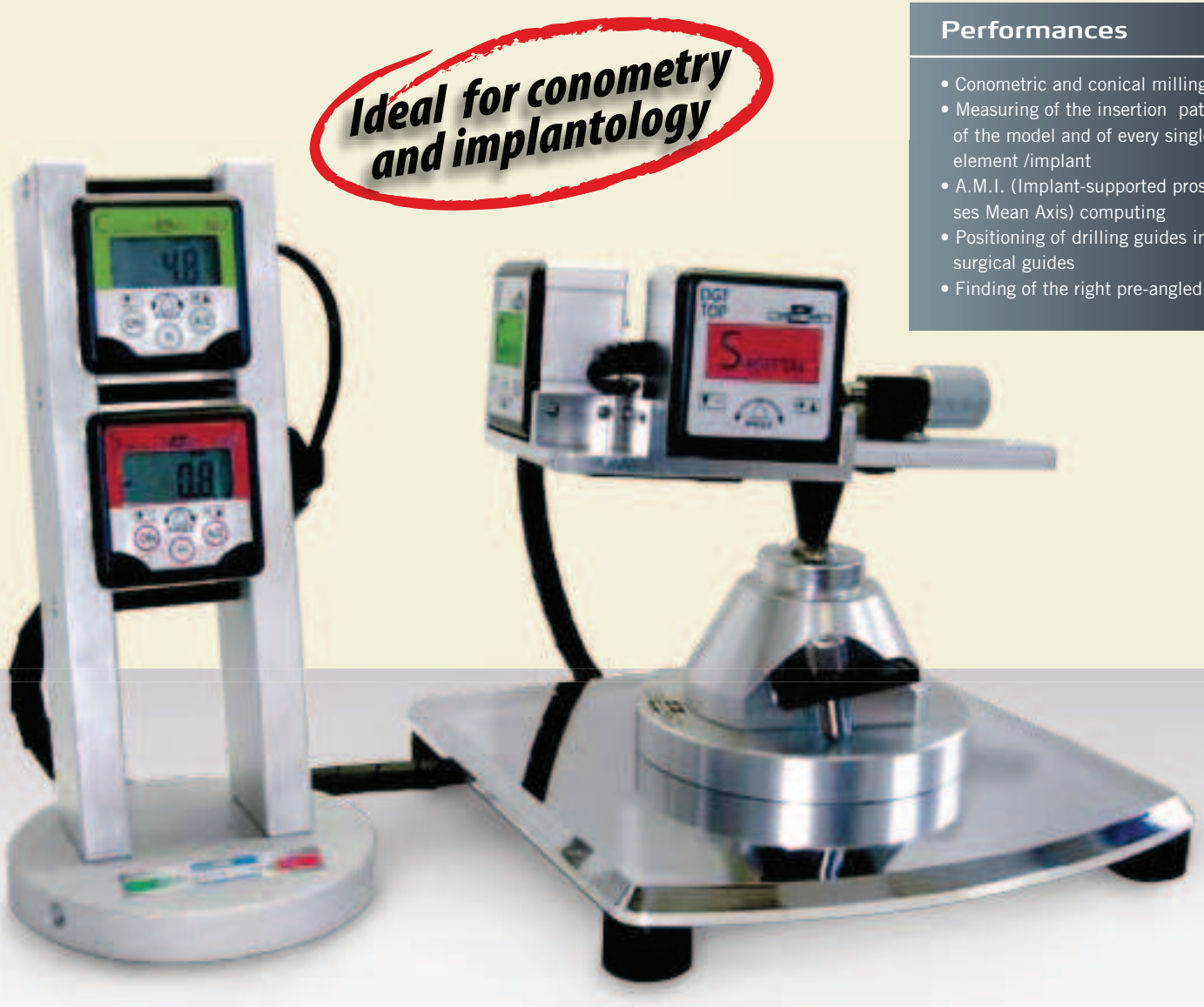
RAP DGT is the last evolution of the technique **for the design of implant-supported prostheses**. The **easy reading** of the digital display allows an **immediate and sure recording** of the angular values a very wide angular range.
The use of the system DGT, combined with the **software AMI**, gives the technician not only the **mean implant axis value** (AMI) and the **aesthetical-functional range** but also points out the **structural risk factor** of the work to be done.
An **advanced approach to the planning** and fabrication of implant-supported prostheses that is **simpler and cheaper** than the past.
The use of mathematical data immediately given by the software allows the technician to **work safely** with the **certainty to perform a flawless denture** either on functional or on aesthetical point of view.

Available bases

- **pneumatic base**, for the vacuum locking either on steel or granite working planes;
- **steel base**, for the locking on electro-magnetic working planes o;
- **switch-off magnetic base**, for the locking on steel working planes.

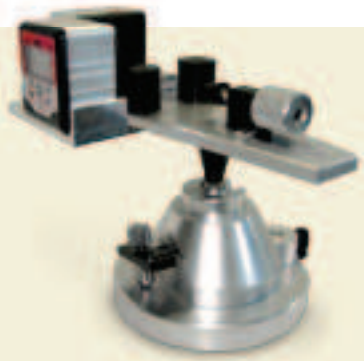
Available plates

- **mechanical plates**, suitable for a universal fixing of the model;
- **plates for articulators or split-cast systems**, to guarantee the perfect re-positioning of the model on its original position;
- **special plates** designed for Galileo Pack application.



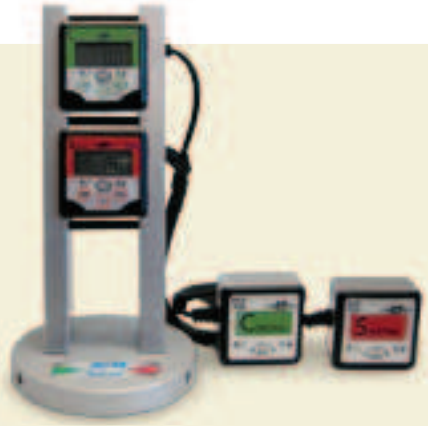
Performances

- Conometric and conical milling
- Measuring of the insertion path of the model and of every single element /implant
- A.M.I. (Implant-supported prostheses Mean Axis) computing
- Positioning of drilling guides in the surgical guides
- Finding of the right pre-angled post



DGT SOFT: the basic

The simplest and powerful solution to record the angular data.



DGT TOP: the useful

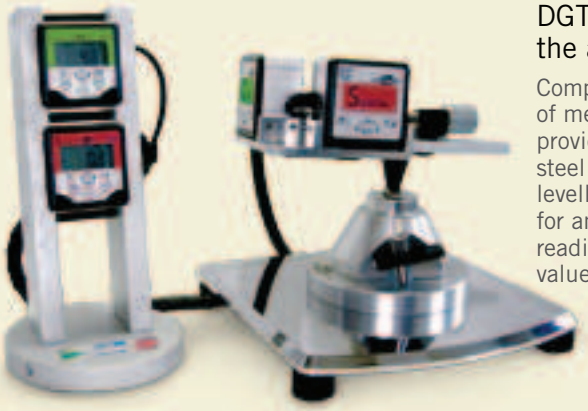
A reclined catchy dashboard for an easy reading of the strong inclinations.

DGT BASE

Stell base with levelling devices, included in DGT FULL.

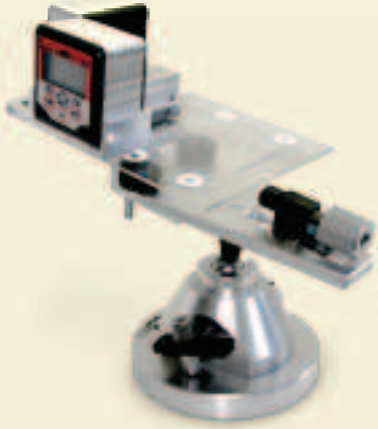
DGT TEST

Help-device to verify the right levelling.



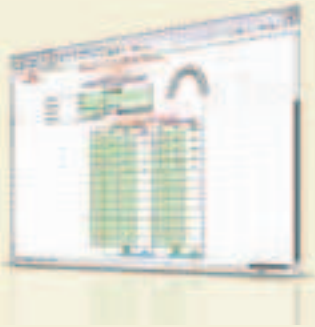
DGT FULL: the absolute

Complete center of measurement provided with steel base having levelling registers for an absolute reading of the values.



Galileo Pack for surgical guides

A set of accessories that allow the base DGT to be used for making surgical guides (Computer Aided Implantology with Winmed DGT system).



AMI software

Starting from the simply filling in of the inclinations this software, easy to experience, automatically computes the **A.M.I. value**, the **aesthetical-functional range** and the **global risk factor** of the work to be done. Furthermore it suggests the cone cutter to use and the tailored milling inclination of each element to guarantee the best common path of insertion.

Path of insertion in implant dentistry

Occlusion is an important variable in the success or failure of most prosthodontic reconstructions. With natural teeth, a certain degree of flexibility permits compensation for any occlusal irregularities. Implant dentistry is not as forgiving. **The most significant factor** affecting stability of an implant-supported restoration is occlusal loading. Excess loading may lead to loosening of abutment screws and, if undetected, to possible fracture. Overloading may also **damage the implant and superstructure and lead to loss of osseointegration.**

The literature generally agrees in recommending an implant placement in axis with the load and therefore perpendicular to the occlusal plane. In optimal situations and for little spans this can be realized. Nevertheless, if conditions are not optimal and the number and the distribution of **the implants are more complex placement of the implants with distant inclinations will be necessary.** In fact, frequently implants are positioned in relation to future tooth replacement and within the extent of existing bone and they so present quite different angulations. **The choice of a common milling** axis to prepare the abutments is based on **several clinical and technical elements together with the experience of the operator.** Technicians usually define the milling implant axis arbitrarily without an exact evaluation of the angular inclination of each individual implant. As a consequence some implants **may present excessive angular preparations (millings)** in order to compensate for a common path of insertion. Extremely angulated abutments often have reduced height, compromised fixation screws and reduced structural integrity or may represent areas of stress concentration, prone to technical failure.

Since 2005 we defined the M.I.A. (mean implant axis) methodology in controlling the angular preparation of multiple implant abutments. **This method increase the probability to better prepare abutment by evaluating all implant angulations** (using RAP or RAP DGT model holder base), calculating the mean implant axis (AMI) and by preparing the abutments within the possible angular ranges offered by the chosen cone cutter. **A dedicated software has been developed to calculate the mean implant** axis among a set of implants so to give the clinician and the technician a fast and precise system to prepare implant abutments. **Till today no other standard methodologies** have been defined in order to establish such a fundamental technical data.